

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Teck Kheng Lee

Serial No.: Not Yet Assigned

Filed: April 22, 2004

For: METHODS FOR ASSEMBLY AND
PACKAGING OF FLIP CHIP
CONFIGURED DICE WITH INTERPOSER

Confirmation No.: Unknown

Examiner: Unknown

Group Art Unit: Unknown

Attorney Docket No.: 2269-4974.2US
(00-0693.02/US)

NOTICE OF EXPRESS MAILING

Express Mail Mailing Label Number: EV325782187US

Date of Deposit with USPS: April 22, 2004

Person making Deposit: Christopher Haughton

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The present application is a divisional of application Serial No. 10/150,901, filed May 17, 2002, pending, which is related to U.S. Patent Application Serial No. 09/944,465 filed August 30, 2001 and entitled MICROELECTRONIC DEVICES AND METHODS OF MANUFACTURE, and to the following U.S. Patent Applications also filed May 17, 2002: Serial No. 10/150,893, entitled INTERPOSER CONFIGURED TO REDUCE THE PROFILES OF SEMICONDUCTOR DEVICE ASSEMBLIES AND PACKAGES INCLUDING THE SAME AND METHODS; Serial No. 10/150,892, entitled METHOD AND APPARATUS FOR FLIP-CHIP PACKAGING PROVIDING TESTING CAPABILITY; Serial No. 10/150,516, entitled

SEMICONDUCTOR DIE PACKAGES WITH RECESSED INTERCONNECTING STRUCTURES AND METHODS FOR ASSEMBLING THE SAME; Serial No. 10/150,653, entitled FLIP CHIP PACKAGING USING RECESSED INTERPOSER TERMINALS; and Serial No. 10/150,902, entitled METHOD AND APPARATUS FOR DIELECTRIC FILLING OF FLIP CHIP ON INTERPOSER ASSEMBLY.

Pursuant to M.P.E.P. 2001.06(b), the Examiner is respectfully requested to consider the information of record in the prior applications, and to confirm in the first Office Action on the merits that such art has in fact been reviewed. A PTO-1449 form listing all of the information of record in the prior applications is enclosed herewith.

This Information Disclosure Statement is filed within three (3) months of the filing date of the above-identified application, and no certification pursuant to 37 C.F.R. § 1.97(c) or a fee pursuant to 37 C.F.R. 1.17(p) is required.

Respectfully submitted,



Trent N. Butcher, P.E.
Registration No. 51,518
Attorney for Applicant(s)
TRASKBRITT
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

Date: April 22, 2004
TNB/ps:ljb

Enclosures: Form PTO-1449
Document in ProLaw

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>			Docket Number (Optional) 2269-4974.2US (00-0693.02/US)		Application Number Not Yet Assigned	
			Applicant Teck Kheng Lee			
			Filing Date April 22, 2004		Group Art Unit Unknown	

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,807,021	02/1989	Okumura			
	5,347,159	09/1994	Khandros et al.			
	5,366,794	11/1994	Nakao			
	5,385,869	01/1995	Liu et al.			
	5,386,341	01/1995	Olson et al.			
	5,397,921	03/1995	Karnazos			
	5,409,865	04/1995	Karnazos			
	5,422,205	06/1995	Inoue et al.			
	5,438,477	08/1995	Pasch			
	5,448,511	09/1995	Paurus et al.			
	5,504,277	04/1996	Danner			

FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	APPLICANT	CLASS	SUBCLASS	Translation	
						YES	NO
	WO 99/65282	12/1999	Eide				
	JP 2002-028702/04	09/1999	Katsumasa				
	JP 2000-183082	06/2000	Hitachi Ltd.				

OTHER DOCUMENTS		(Including Author, Title, Date, Pertinent Pages, Etc.)
		U. S. Patent Application entitled MICROELECTRONIC DEVICES AND METHODS OF MANUFACTURE, filed August 30, 2001, Serial No. 09/944,465.
		ISAAK, H. et al., "Development of Flex Stackable Carriers" IEEE Electronic Components and Technology Conference, 2000 Proceedings 50th, 5/21/2000-5/24/2000, Las Vegas, NV, USA, pp. 378-84, IEEE Catalog No: 00CH37070.
		Copy of Australian Patent Office, Search Report, 30 May 2003, 4 pages.

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional) 2269-4974.2US (00-0693.02/US)		Application Number Not Yet Assigned	
				Applicant Teck Kheng Lee			
				Filing Date April 22, 2004		Group Art Unit Unknown	

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,598,033	01/1997	Behlen et al.			
	5,646,446	07/1997	Nicewarner, Jr. et al.			
	5,663,530	09/1997	Schueller et al.			
	5,668,405	09/1997	Yamashita			
	5,674,785	10/1997	Akram et al.			
	5,697,148	12/1997	Lance, Jr. et al.			
	5,710,071	01/1998	Beddingfield et al.			
	5,719,449	02/1998	Strauss			
	5,721,151	02/1998	Padmanabhan et al.			
	5,739,585	04/1998	Akram et al.			
	5,747,982	05/1998	Dromgoole et al.			

FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS		(Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>			Docket Number (Optional) 2269-4974.2US (00-0693.02/US)		Application Number Not Yet Assigned	
			Applicant Teck Kheng Lee			
			Filing Date April 22, 2004		Group Art Unit Unknown	

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,752,182	05/1998	Nakatsuka et al.			
	5,758,413	06/1998	Chong et al.			
	5,798,285	08/1998	Bentlage et al.			
	5,798,567	08/1998	Kelly et al.			
	5,805,422	09/1998	Otake et al.			
	5,818,113	10/1998	Iseki et al.			
	5,834,338	11/1998	Takeda et al.			
	5,834,366	11/1998	Akram			
	5,834,848	11/1998	Iwasaki			
	5,835,355	11/1998	Dordi			
	5,843,808	12/1998	Kamezos			

FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS		(Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>	Docket Number (Optional) 2269-4974.2US (00-0693.02/US)	Application Number Not Yet Assigned
	Applicant Teck Kheng Lee	
	Filing Date April 22, 2004	Group Art Unit Unknown

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,844,168	12/1998	Schueller et al.			
	5,866,953	02/1999	Akram et al.			
	5,886,408	03/1999	Ohki et al.			
	5,891,753	04/1999	Akram			
	5,898,224	04/1999	Akram			
	5,973,389	10/1999	Culnane et al.			
	5,973,404	10/1999	Akram et al.			
	5,977,640	11/1999	Bertin et al.			
	5,982,030	11/1999	MacIntyre			
	5,984,691	11/1999	Brodsky et al.			
	5,990,545	11/1999	Schueller et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>	Docket Number (Optional) 2269-4974.2US (00-0693.02/US)	Application Number Not Yet Assigned
Applicant Teck Kheng Lee		
Filing Date April 22, 2004		Group Art Unit Unknown

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,991,161	11/1999	Samaras et al.			
	6,005,776	12/1999	Holman et al.			
	6,008,543	12/1999	Iwabuchi			
	6,011,694	01/2000	Hirakawa			
	6,013,948	01/2000	Akram et al.			
	6,020,629	02/2000	Farnworth et al.			
	6,024,584	02/2000	Lemke et al.			
	6,027,346	02/2000	Sinsheimer et al.			
	6,028,365	02/2000	Akram et al.			
	6,034,427	03/2000	Lan et al.			
	6,039,889	03/2000	Zhang et al.			

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
					YES	NO

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional) 2269-4974.2US (00-0693.02/US)		Application Number Not Yet Assigned	
				Applicant Teck Kheng Lee			
				Filing Date April 22, 2004		Group Art Unit Unknown	

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,040,630	03/2000	Panchou et al.			
	6,050,832	04/2000	Lee et al.			
	6,057,178	05/2000	Galuschki et al.			
	6,060,782	05/2000	Ohsono et al.			
	6,064,114	05/2000	Higgins, III			
	6,072,233	06/2000	Corisis et al.			
	6,074,897	06/2000	Degani et al.			
	6,075,710	06/2000	Lau			
	6,079,991	06/2000	Lemke et al.			
	6,093,035	07/2000	Lemke et al.			
	6,116,921	09/2000	Scholz et al.			

FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS			(Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional) 2269-4974.2US (00-0693.02/US)		Application Number Not Yet Assigned	
				Applicant Teck Kheng Lee			
				Filing Date April 22, 2004		Group Art Unit Unknown	

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,124,631	09/2000	Cardot et al.			
	6,127,736	10/2000	Akram			
	6,137,062	10/2000	Zimmerman			
	6,137,164	10/2000	Yew et al.			
	6,137,183	10/2000	Sako			
	6,157,541	12/2000	Hacke			
	6,165,885	12/2000	Gaynes et al.			
	6,172,422 B1	01/2001	Chigawa et al.			
	6,179,598 B1	01/2001	Brand			
	6,191,487 B1	02/2001	Rodenbeck et al.			
	6,208,521 B1	03/2001	Nakatsuka			

FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS			(Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional) 2269-4974.2US (00-0693.02/US)		Application Number Not Yet Assigned	
				Applicant Teck Kheng Lee			
				Filing Date April 22, 2004		Group Art Unit Unknown	

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,212,768 B1	04/2001	Murakami			
	6,214,156 B1	04/2001	Takano et al.			
	6,218,202 B1	04/2001	Yew et al.			
	6,219,911 B1	04/2001	Estes et al.			
	6,221,763 B1	04/2001	Gilton et al.			
	6,225,688 B1	05/2001	Kim et al.			
	6,229,711 B1	05/2001	Yoneda			
	6,262,895 B1	07/2001	Forthun			
	6,291,775 B1	09/2001	Saitoh			
	6,294,455 B1	09/2001	Ahn			
	6,300,679 B1	10/2001	Mukerji et al.			

FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS			(Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional) 2269-4974.2US (00-0693.02/US)		Application Number Not Yet Assigned	
				Applicant Teck Kheng Lee			
				Filing Date April 22, 2004		Group Art Unit Unknown	

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,310,288 B1	10/2001	Moden			
	6,323,060 B1	11/2001	Isaak			
	6,413,102 B2	07/2002	Jiang et al.			
	6,429,516 B1	08/2002	Tsunoi			
	6,432,737 B1	08/2002	Webster			
	2002/0167092 A1	11/2002	Fee et al.			
	6,489,687 B1	12/2002	Hashimoto			
	6,492,737 B1	12/2002	Imasu et al.			
	6,518,677 B1	02/2003	Capote et al.			

FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS			(Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.